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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,743	01/10/2002	Scott James Weaver	9288 (3225-130)	3989
26884	7590	07/27/2006	EXAMINER	
PAUL W. MARTIN NCR CORPORATION, LAW DEPT. 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001			VU, TUAN A	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/041,743	Applicant(s) WEAVER, SCOTT JAMES	
	Examiner Tuan A. Vu	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 7/7/06.

As indicated in Applicant's response, claim 32 has been amended. Claims 17-33 are pending in the office action.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17, 20-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a "useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

Claim 17 recites creating 2 schemas of respective software components and integrate them into a data wedge, which appears to be using of a interface created for an user to enter some modeling components; populating a model with data from one software component and translating one element from such model, using the wedge, into a format of the other software component. As a whole, the claim amounts to translating data element of one format into a format of another, and without further contextual description, this translation appears to lead to no application, nor does it reasonably convey any practical use of this format translation (i.e. what is the real use being subsequent to – or based on – the translation recited as having been performed on an abstract concept like a model of a software component) in order to yield real

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world results. Absent any of information that would enable one skill in the art to construe the realization of a useful, concrete, tangible result, the claim teachings remain abstract in the sense that all entities being recited remain in an abstract realm, i.e. entities not integrated in a real world application. Therefore, as a whole, the claim fails the Practical Application Test as set forth above, and is rejected for leading to a non-statutory subject matter.

Claims 20-24 are equally rejected for being not applicable beyond the state of an abstract idea.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamboli et al., USPN: 6,792,431 (hereinafter Tamboli).

As per claim 17, Tamboli discloses a method of translating data from a data format of a first software component to a format of a data model of a second software component, the method comprising the steps of:

creating a first schema comprising the model of the first software component (e.g. Fig 1: adapter 102, Transform 206, mappings 120 – Note: *dynamic common format* and *mappings* generated by XSL via adapter service on XML metadata reads on schema model– see col. 10,

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lines 35-58; Fig. 4 – of the first software component -- see First Native 106 – Fig 1); integrating the first schema into a data wedge (e.g. Dynamic Common Model 118– Fig 2);

creating a second schema comprising the model of the second software component (e.g. e.g. Fig. 1: adapter 124, Transform 206, mappings 120 – Note: mappings and adapter transformation for the second native format reads on XML schema model for second software component); integrating the second schema into a data wedge (e.g. Dynamic Common Model 118 – Fig 2; col. 7, lines 36-47);

populating a data model of the first software component (e.g. Fig. 4 – Note: mappings for a XML schema reads on populating a model with its mappings – see *common format subsets of a dynamic common model 119-* col. 20, lines 12-22; Fig. 17 – Note: subsets of a common model are also model);

translating a data element in the data model from a first format of the first software component schema to a second format of the second software component (e.g. Fig. 2, Fig. 10, 10A, 10B) using the data wedge (e.g. col. 7, line 36 to col. 8, line 13).

As per claim 18, Tamboli discloses triggering an event to notify the second software component of translated data element availability (spider - col. 22, lines 37-51; Fig. 11C, Fig. 19 - Note: event information passing by *spider* to update (or synchronizing) catalog with available transformed methods from data integration application reads on event notification by a process).

As per claim 19, Tamboli discloses reading translated data by the second software component (Note: data being converted for use as method/program native to and for another application reads on data being read by such applications via transformation service (*adapters*) and updating services (*spiders*) – see col. 4, line 5-31).

As per claim 20, Tamboli discloses removing and updating elements from a model (e.g. col. 7, lines 50-60; col. 20, line 55 to col. 21, line 22 – Note: manually updating of catalog model by user reads on removing and updating)

As per claim 21, Tamboli discloses creating an instance of a data wedge (e.g. Data Integration Application 116, Fig. 1-2– Note: a runtime conversion graphical framework retrieving specific native file by a user reads on instance of a data wedge).

As per claim 22, Tamboli discloses subsets of a common format model of a data wedge (col. 7, lines 32-50; *dynamic common formats 119 ... dynamic common format 118* – col. 20, line 11-22), hence has disclosed both first and second software schema including name of common data wedge.

As per claim 23, Tamboli discloses setting default value and default data elements for the data model of the first software component (Fig. 4; col. 19, line 61-67; col. 20, lines 11-17 – Note: XSL using data from native form and mappings to create XSL file reads on populating fields on XSL with mappings, i.e. XSL default template/tags are being populated – see Fig. 8)

As per claim 24, user manually changing attributes of model reads on modifying data element of a data model of first component (re claim 20)

As per claim 25, Tamboli discloses a computer system for translating data from a data format of a first software component to a format of a data model of a second software component, the system comprising a processor; a memory coupled to said processor; the memory having stored therein data and sequences of instructions which, when executed by said processor, cause said processor to integrate software components by causing the processor to:

create a first schema of the first software component,

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integrate the schema into a data wedge,
create a second schema of the second software component, integrate the second schema into a data wedge;
populate a data model of the first software component, and
translate data elements in the data model from a first format of a first software component schema to a second format of a second software component; all of these steps having been addressed in the corresponding rejection thereof in claim 1.

As per claims 26-31, these claims correspond to claims 18, 20, 21, 24, 22 and 23 respectively; and are rejected with the corresponding rejections as set forth therein.

As per claim 32, Tamboli discloses a computer system for translating data from a data format of a first software component to a format of a data model of a second software component, the system comprising a processor; a memory coupled to said processor, wherein said processor is configured to execute a sequence of instructions contained in said memory, the instructions comprising:

a data wedge (e.g. Dynamic Common Model 118– Fig 2) including a first schema of the first software component (e.g. Fig 1: adapter 102, Transform 206, mappings 120; col. 10, lines 35-58; Fig. 4 – Note: transformation using mappings from XML metadata from a first native form reads on the first software component -- see First Native 106 – Fig 1) and

a second schema of the second software component (e.g. Fig. 1: adapter 124, Transform 206, mappings 120 – Note: mappings and adapter transformation for the second native format reads on XML schema model for second software component being integrated into the modeling

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application); integrating the first schema into a data wedge (e.g. Dynamic Common Model 118 – Fig 2; col. 7, lines 36-47.);

the data wedge configured to translate a data element from the first data view in accordance with the first schema to the second data view in accordance with the second schema (Fig. 2, Fig. 10, 10A, 10B; col. 7, line 36 to col. 8, line 13).

As per claim 33, Tamboli discloses data model in a integration application (e.g. Fig. 1) configured to trigger an event to notify the second software component of translated data element availability (spider - col. 22, lines 37-51; Fig. 11C, Fig. 19 - Note: event information passing by *spider* to update (or synchronizing) catalog with available transformed methods – from one native form to another – effectuated from within the data integration application reads on event notification by a process).

6. Claims 17, 25, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Worden et al., USPubN: 2003/0149934 (hereinafter Worden)

As per claim 17, Worden discloses a method of translating data from a data format of a first software component to a format of a data model of a second software component, the method comprising the steps of:

creating a first schema comprising the model of the first software component (e.g. Fig. 10: XML (1), Schema (1); para 0014-0119);

creating a second schema comprising the model of the second software component; integrating the first schema into a data wedge (e.g. Fig. 10: XML (2), Schema(2) – Note: business information model and graphical interface reads on data wedge—see para 0037-0042);

populating a data model of the first software component (e.g. Fig. 32-59);

translating a data element in the data model from a first format of the first software component schema to a second format of the second software component (e.g. para 0844-0854; Fig. 57-58; para 0279-0285).

As per claim 25, see claim 17.

As per claim 32, Worden discloses a computer system for translating data from a data format of a first software component to a format of a data model of a second software component, the system comprising a processor; a memory coupled to said processor, wherein said processor is configured to execute a sequence of instructions contained in said memory, the instructions comprising:

a data wedge (e.g. Note: business information model and graphical interface reads on data wedge—see para 0037-0042) including a first schema of the first software component (e.g. Fig. 10: XML (1), Schema (1); para 0014-0119) and

a second schema of the second software component (e.g. Fig. 10: XML (2), Schema(2));
the data wedge configured to translate a data element from the first data view in accordance with the first schema to the second data view in accordance with the second schema (e.g. para 0844-0854; Fig. 57-58; para 0279-0285).

Response to Arguments

7. Applicant's remarks with respect to claims 17-33 as per the submission filed 7/7/06 have been considered but are moot in view of the new grounds of rejection.

Conclusion

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu
Patent Examiner,
Art Unit 2193
July 24, 2006